

Claims

1. A system (1) for transmitting and presenting video data, which system (1) includes a video center (2) with a communications module (21), which system (1) includes a telecommunications network (3) with at least one
 5 communications terminal connected thereto, the video center (2) being set up to transmit the video data by means of the communications module (21) via the telecommunications network (3) to the communications terminal (4), the communications terminal (4) comprising at least one display device (41) which present received video data to the user of the communications terminal (4) in a
 10 visible way and which includes an eye position tracking module (411) which determines current eye positions of the user, and the communications terminal (4) including an eye position feedback module (42) which transmits the determined actual eye positions to the video center (2), wherein

the video display device (41) is a virtual retinal display device which
 15 projects picture signals corresponding to the received video data onto the retina (51) of the user,

the video center (2) includes a database (24) and/or a file server in which the video data are stored in digital form, and

the video center (2) includes a video filter module (22), which filter the
 20 stored video data , prior to their transmission, on the basis of received current eye positions such that outer picture regions, corresponding to the video data, which are projected on the retina (51) outside the fovea (511) have a lower resolution than inner picture regions, corresponding to the video data, which are projected on the retina (51), and the filtered video data therefore contain a
 25 lesser quantity of data than the unfiltered video data.

2. The system (1) according to claim 1, wherein the telecommunications network (3) comprises a mobile network, and the communications terminal (4) is a mobile radio device.

3. The system (1) according to one of the claims 1 or 2, wherein the
 30 video filter module (22) has a cut-out function (221) which filters out at least

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certain of the video data corresponding to the outer picture regions so that the picture region corresponding to the filtered video data is a section from the picture region corresponding to the unfiltered video data, which section contains at least the inner picture region.

5 4. The system (1) according to one of the claims 1 to 3, wherein the video center (2) includes a prediction module (23), which stores eye positions determined by the eye position tracking module (411), and which predicts a subsequent eye position on the basis of these stored eye positions.

10 5. The system (1) according to claim 4, wherein the prediction module (23) predicts a subsequent eye position taking into consideration the video data.

15 6. The system (1) according to one of the claims 1 to 5, wherein it includes a correction module (43) which receives correction values from the user, stores the received correction values, and corrects eye positions, determined by the eye position tracking module (411), with the stored correction values.

20 7. A method for transmitting and presenting video data in which method the video data are transmitted from a video center (2) over a telecommunications network (3) to a communications terminal (4) and are presented there by a video display device (41) in a visible way for the user of the communications terminal (4), current eye positions of the user being determined and the determined current eye positions being transmitted to the video center (2), wherein

25 the video data are obtained from a database (24) and/or from a file server of the video center (2), where the video data are stored in digital form,

- the video display device (41) projects picture signals corresponding to the video data onto the retina (51) of the user, and

30 - the video data are filtered in the video center (2), prior to their transmission, on the basis of received current eye positions such that outer picture regions, corresponding to the video data, which are projected on the

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retina (51) outside the fovea (511) have a lower resolution than inner picture regions, corresponding to the video data, which are projected on the fovea (511) of the retina (51), and the filtered video data therefore contain a lesser quantity of data than the unfiltered video data.

5 8. The method according to claim 7, wherein the telecommunications network (3) comprises a mobile network, and the communications terminal (4) is a mobile radio device.

9. The method according to one of the claims 7 or 8, wherein at least certain of the video data corresponding to the outer picture regions are filtered
10 out so that the picture region corresponding to the filtered video data is a section from the picture region corresponding to the unfiltered video data, which section contains at least the inner picture region.

10. The method according to one of the claims 7 to 9, wherein the determined eye positions are stored in the video center (2), and a subsequent
15 eye position is predicted on the basis of these stored eye positions.

11. The method according to claim 10, wherein a subsequent eye position is predicted taking into consideration the video data.

12. The method according to one of the claims 7 to 11, wherein correction values entered by the user are received, the received correction
20 values are stored, and the determined eye positions are corrected with the stored correction values.

13. A video center (2) which includes a communications module (21), which is set up to receive requests for video data from communications terminals (4) over a telecommunications network (3) and transmit requested
25 video data to a respective communications terminal (4), wherein

it includes a database (24) and/or a file server in which the video data are stored in digital form, and

it includes a video filter module (22) which filters video data, prior to their transmission, on the basis of current eye positions of the user of the respective
30 communications terminal (4), which eye positions are transmitted from the respective communications terminal (4) to the video center (2), such that outer

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picture regions, corresponding to the video data, which are projected onto the retina (51) outside the fovea (511), have a lower resolution than inner picture regions, corresponding to the video data, which are projected on the fovea (511) of the retina (51), and the filtered video data therefore contain a lesser
5 quantity of data than the unfiltered video data.

14. The video center (2) according to claim 13, wherein the video filter module (22) has a cut-out function (221) which filters out at least certain of the video data corresponding to the outer picture regions so that the picture region corresponding to the filtered video data is a section from the picture region
10 corresponding to the unfiltered video data, which section contains at least the inner picture region.

15. The video center (2) according to one of the claims 13 or 14, wherein it includes a prediction module (23) which stores eye positions transmitted by the respective communications terminal (4), and which predicts a subsequent
15 eye position on the basis of these stored eye positions..

16. The video center (2) according to claim 15, wherein the prediction module (23) predicts a subsequent eye position taking into consideration the video data.

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